



Water-Data Report 2008

01407500 SWIMMING RIVER NEAR RED BANK, NJ

SHREWSBURY RIVER BASIN

LOCATION.--Lat 40°19'11", long 74°06'56" referenced to North American Datum of 1983, Colts Neck Township, Monmouth County, NJ, Hydrologic Unit 02030104, on left bank 50 ft upstream from spillway at Swimming River Reservoir, 1,000 ft upstream of bridge on Swimming River Road (County Route 50), 3.3 mi southwest of Red Bank, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1922 to current year.

REVISED RECORDS.--WSP 891: 1939. WDR NJ-83-1: Drainage area. WDR NJ-90-1: 1989

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 30.00 ft above NGVD of 1929. Prior to Jan 19, 1962, at site 800 ft upstream at datum 17.67 ft lower. Jan 19 to Mar 30, 1962, nonrecording gage, 700 ft upstream at datum 13.87 ft lower.

REMARKS.--Records fair, except for estimated daily discharges and discharges less than 5 ft³/s, which are poor. Records given herein represent flow over spillway and flow or leakage through blowoff gates. Flow regulated by and diversions from Swimming River Reservoir for municipal supply (see 01407498 and 01407499). Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1919 reached a stage of 7.84 ft (site and datum then in use; from floodmark), discharge, approximately 11,800 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.2	3.5	15	65	118	39	30	27	21	7.2	6.6	1.8
2	2.2	3.5	13	46	400	36	46	25	15	5.8	5.6	1.7
3	2.1	3.5	58	31	93	31	34	24	10	4.8	6.5	1.7
4	2.1	3.4	41	25	51	29	90	27	24	4.0	5.3	1.6
5	2.0	3.3	26	24	47	69	76	24	127	3.9	4.4	1.6
6	2.0	3.5	18	23	39	58	44	20	45	4.5	3.9	1.6
7	2.0	3.8	14	24	43	56	36	17	26	e4.5	3.6	2.0
8	1.9	3.8	11	24	38	418	34	16	e15	e4.3	3.2	2.0
9	1.9	3.8	8.7	22	32	280	34	56	e9.5	3.8	2.8	2.0
10	1.9	3.9	11	17	30	88	32	107	6.7	3.5	2.7	2.1
11	2.0	3.9	12	36	17	66	31	44	5.4	2.9	2.7	2.1
12	2.0	3.8	11	63	15	59	60	94	4.5	2.7	2.6	2.1
13	2.0	3.9	19	38	312	47	46	104	3.9	2.6	2.6	2.1
14	2.0	3.9	95	100	313	45	32	45	3.7	2.5	2.6	2.1
15	1.9	4.0	35	65	93	50	30	34	30	2.5	2.7	2.1
16	1.9	4.1	185	39	55	46	25	113	64	2.4	3.0	2.0
17	1.9	4.0	117	31	45	38	23	224	28	2.3	3.0	2.0
18	1.9	3.9	43	154	54	34	22	81	14	2.2	2.8	2.0
19	1.9	4.1	32	83	56	59	19	67	e11	2.2	2.7	1.9
20	2.0	4.8	30	42	36	151	18	60	e9.0	2.1	2.6	1.9
21	2.1	5.1	26	24	35	70	18	117	6.2	2.0	2.5	1.8
22	2.1	5.3	24	23	45	46	16	54	5.3	2.0	2.4	1.8
23	2.1	5.3	63	24	58	42	16	37	4.9	1.9	2.3	1.8
24	2.1	5.2	162	24	48	38	16	28	4.7	2.2	2.3	1.7
25	2.2	5.0	59	22	45	38	12	23	4.4	2.4	2.2	1.7
26	2.2	7.7	38	21	47	33	11	18	4.0	2.3	2.1	2.6
27	2.6	23	50	21	53	34	13	17	3.7	40	2.1	6.4
28	3.2	26	37	21	40	38	27	29	3.4	295	2.0	15
29	3.5	22	84	21	32	33	98	24	3.3	41	1.9	408
30	3.5	19	65	22	---	30	42	16	6.1	16	1.9	74
31	3.5	---	113	20	---	31	---	16	---	9.3	1.9	---
Total	68.9	200.0	1,515.7	1,195	2,290	2,132	1,031	1,588	518.7	484.8	95.5	553.2
Mean	2.22	6.67	48.9	38.5	79.0	68.8	34.4	51.2	17.3	15.6	3.08	18.4
Max	3.5	26	185	154	400	418	98	224	127	295	6.6	408
Min	1.9	3.3	8.7	17	15	29	11	16	3.3	1.9	1.9	1.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	38.0	53.8	67.0	78.1	88.7	101	91.1	67.8	46.3	36.8	34.7	35.9
Max	163	208	196	248	201	216	229	227	154	187	128	210
(WY)	(1944)	(1973)	(1978)	(1978)	(1979)	(1994)	(2007)	(1998)	(2003)	(1938)	(1955)	(1938)
Min	0.00	0.00	0.00	0.00	0.05	0.53	1.53	4.07	0.00	0.00	0.00	0.00
(WY)	(1971)	(1981)	(1981)	(1981)	(2002)	(2002)	(2002)	(1985)	(1985)	(1966)	(1957)	(1980)

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	Calendar Year 2007	Water Year 2008			Water Years 1922 - 2008	
Annual total	21,625.6		11,672.8			
Annual mean	59.2		31.9		61.5	
Highest annual mean					123	1928
Lowest annual mean					3.30	2002
Highest daily mean	1,600	Apr 16	418	Mar 8	^a 3,050	Oct 27, 1943
Lowest daily mean	1.9	Oct 8	1.6	Sep 4-6	0.00	Many days
Annual seven-day minimum	1.9	Oct 13	1.7	Aug 31	0.00	Many days
Maximum peak flow			741	Sep 29	^a 8,910	Oct 27, 1943
Maximum peak stage			5.74	Sep 29	8.96	Oct 27, 1943
Instantaneous low flow			1.5	Sep 5, 6	0.00	Many days
10 percent exceeds	117		66		119	
50 percent exceeds	30		16		43	
90 percent exceeds	2.8		2.0		0.27	

^a From rating curve extended above 1,000 ft³/s on basis of weir formula, site and datum then in use.

